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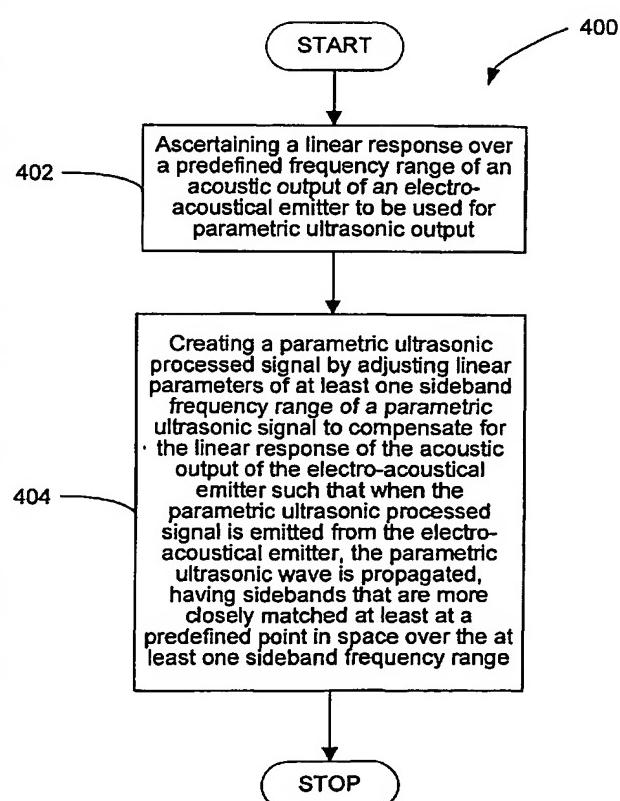
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(54) Title: METHOD OF ADJUSTING LINEAR PARAMETERS OF A PARAMETRIC ULTRASONIC SIGNAL TO REDUCE NON-LINEARITIES IN DECOUPLED AUDIO OUTPUT WAVES AND SYSTEM INCLUDING SAME



(57) Abstract: A method and system of producing a parametric ultrasonic wave (148) to be decoupled in air to create a decoupled audio wave that closely corresponds to an audio input signal (131). The method is comprised of ascertaining (402) a linear response over a predefined frequency range of an acoustic output of an electro-acoustical emitter (146) to be used for parametric ultrasonic output. A parametric ultrasonic processed signal (144) is then created by adjusting (404) linear parameters of at least one sideband frequency range of a parametric ultrasonic signal to compensate for the linear response of the acoustic output of the electro-acoustical emitter (146) such that when the parametric ultrasonic wave is propagated, having sidebands that are closely matched at least at a predefined point in space over the at least one sideband frequency range.

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